# MAR 1 3 2002 INFORM%TION DISCI STATEMENT BY APPLICANT

SERIAL NO. 1 09/978,455 MAP 1 000 ED DOCKET NO. 10020/20702 **APPLICANT** LAMANSKY et al. FILING DATE

#### **U. S. PATENT DOCUMENTS**

October 16, 2001

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS	SUBCLASS	FILING DATE
	-					

#### FOREIGN PATENT DOCUMENTS

						TRANSL	ATION
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	МО
	,					<b>1</b>	k

#### OTHER DOCUMENTS

	OTHER DOCUMENTS						
XAMINER INITIAL	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.						
Mey	M. A. Baldo, et al., "Highly efficient phosphorescent emission from organic electroluminescent devices Nature, September 1998, Vol. 395, pp. 151-154.						
Ney	M.A. Baldo, et al., "Very high-efficiency green organic light-emitting devices based on electrophosphorescence", Applied Physics Letters, Vol. 75, No. 1, pp. 4-6, & July 1999.						
Mey	C. Adachi, et al., "High-efficiency organic electrophosphorescent devices with tris(2-phenylpyridine) iridium doped into electron-transporting materials", App. Phys. Lett., Vol. 77, No. 6, pp. 904-906, (7 August 2000).						
Mey	C. Adachi, et al., "High-efficiency red electrophosphorescence devices", App. Phys. Lett., Vol. 78, No. 11, pp. 1622-1624 (12 March 2001).						
May	C. Adachi, et al., "High efficiency organic light emitting diodes using electrophosphorescence", Am. Phys. Soc., Series II, Vol. 46, No. I, Part II, p. 863 (March 2001).						
Mey	M.A. Baldo, et al., "Excitonic singlet-triplet ratio in a semiconducting organic thin film", Phys. Rev., B Vol. 60, No. 20, pp. 14422-14428 (18 November 1999).						
Mey	R.H. Friend, et al., "Electroluminescence in conjugated polymers", Nature (London), Vol. 397, pp. 121-128 (14 January 1999).						
Ney	Y. Cao, et al., "Improved quantum efficiency for electroluminescence in semiconducting polymers", Nature (London), Vol. 397, pp. 414-417 (# February 1999).						
Mey	M.A. Baldo, et al., "Transient analysis of organic electrophosphorescence: I. Transient analysis of triplet energy transfer", Phys. Rev. B Vol. 62, No. 16, pp. 10958-10966 (15 October 2000).						
MRY	W.E. Ford, et al., "Reversible triplet-triplet energy transfer within a covalently linked bichromophoric molecule", J. Phys. Chem., 96, pp. 2917-2920 (1992). (April 2, 1992).						
Mey	A. Harriman, et al., "A ruthenium (II) tris(2,2'-bipyridine) derivative possessing a triplet lifetime of 42us"  R. Chem. Commun., pp. 735-736 (1999).						
Mey	Gary L. Miessler, et al., <u>Inorganic Chemistry</u> , 2nd Edition, Prentice-Hall (1998), pages 1-3, 422-424. (no M						

Marie R. Yamnitzky

03/10/03

EXAMINER INITIAL		AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
MEXIPE		O. Lohse, et al., "The Palladium Catalysed suzuki coupling of 2- and 4-chloropyridines", Symeth 1999, 1, pp. 45-48.
MAR 1 3 7	DUIS H	Q.G. Wu, et al., "Blue-luminescent/electroluminescent Zn(II) compounds of 7-azaindole and 12-Pyridyl)-7-azaindole:", Inorg. Chem., 39, pp. 5248-5254 (2000).
P. T. T.	AULT A	Y. Ma, et al., "A ligand-stabilized tetrameric zinc (II) cluster with high-efficiency emission from both singlet and triplet excited states for electroluminescent devices", Adv. Mat., 12, No. 6, pp. 433-435 (2000). (March
HATE	BiBL	A.W. Grice, et al., "High brightness and efficiency blue light-emitting polymer diodes", Appl. Phys. Lett., Vol. 73, No. 5, pp. 629-931 (7 August 1998).
RECT	3	Hosokawa et al., "Highly efficient blue electroluminescence from a distyrylarylene emitting layer with a new dopant," 67 Appl. Phys. Lett. 3853-3855 (December 1995).
MAR 1 8 bo	VED	C. Hosokawa, et al., "Organic multi-color electroluminescence display with fine pixels", Synth. Met., 91, pp. (3-7 (1997).
TC 170	יט <u>ג</u> ר	K.A. King, et al., "Excited State properties of a triply ortho-metalated iridium (III) complex", J. Am. Chem. Soc., 107, pp. 1431-1432 (1985).
		S. Lamansky, et al., "Synthesis and characterization of phosphorescent cyclometalated iridium complexes"  Inorganic Chemistry, 40, pp. 1704-1711 (2004). (March 2001).
		C. Adachi, et al., "Electroluminescence mechanisms in organic light emitting devices employing a europium chelate doped in a wide energy gap bipolar conducting host", <u>J. Appl. Phys.</u> , Vol. 87, No. 11, pp. 8049-8055, June 1, 2000.
		M.A. Baldo, et al., "Transient analysis of organic electrophosphorescence: I. Transient analysis of triplet-triplet annihilation" Phys. Rev. B Vol. 62, No. 16, pp. 10967-10977 (16 October 2000).
-		C. Adachi, et al., "Efficient electrophosphorescence using a doped ambipolar conductive molecular organic thin film", Organic Electronics, 2, pp. 37-43 (2001).
		G.W.V. Cave et al., "C-H Activation Indued by Water. Monocyclometalated to Dicyclometalated: C^N^C Tridentate Platinum Complexes", Organometallics 2000, Vol. 19, No. 7, pp. 1355-1364. (published on New York)
		D.F. O'Brien, et al., "Improved energy transfer in electrophosphorescent devices", Applied Physics Letters, Vol. 74, Number 3, pp. 442-444, (January 18, 1999).
		T. Tsutsui et al., "High quantum efficiency in organic light-emitting devices with iridium-complex as a triplet emissive center", Japanese. J. Appl. Phys., Part 2, No. 12B, vol. 38, pp. L1502-1504 (15 December 1999).
		M. J. Yang et al., "Use of Poly(9-vinylcarbazole) as host material for iridium complexes in high-efficiency organic light emitting devices", Japanese J. Appl. Phys., Part 2, No. 8A, vol. 39, pp. L828-829 (X August 1, 2000).
		C. L. Lee et al., "Polymer phosphorescent light-emitting devices doped with tris(2-phenylpyridine) iridium as a triplet emitter", Appl. Phys. Lett., vol. 77, no. 15, pp. 2280-2282 (# October 2000).
		Shirota et al., "Multilayered organic electroluminescent device using a novel starburst molecule, 4, 4', 4"-tris(3-methylphenylphenylamino) triphenylamine, as a hole transport material", Appl. Phys. Lett., vol.65, no. 7, pp. 807-809 (18 August 1994).
		M. A. Baldo, et al., "High-efficiency fluorescent organic light-emitting devices using a phosphorescent sensitizer", Nature, Vol. 403, pp. 750-753, 17 February 2000.
		Von Zelewsky, et al., "Tailor Made Coordination Compounds for Photochemical purposes", Coordination Chemistry Reviews, 132 (1994) pp. 75-85.
110		
Mey	L	Y. Kunugi, et al., "A Vapochromic LED", J. Am. Chem. Soc., Vol. 120, No. 3, pp. 589-590, 1998. (Dublished on Neb 0/07/1998)

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

LAMANSKY et al. 09/978, 455

	·							
INFO	PM A TION DISC		DOCK 10020/2	ET NO 20702			SERIAL NO 19/978,455	
STAT	RMATION DISC EMENT BY AP PTO-1449	PLICANT	APPLIC LAMA	CANT NSKY et al.				
		SEP 0 3 2002	FILING Octobe	DATE r 16, 2001			GROUP 774	
<u></u>		DEMARK D. S. P.	ATENT DOC	CUMENTS				
EXAMINER INITIAL	PATENT NUMBER	PATENT DATE		NAME		CLASS	SUBCLASS	FILING DATE
							<del></del>	ļ
								<u> </u>
		FOREIGN	PATENT DO	OCUMENTS			10.	
EXAMINER	DOCUMENT						700	PRANSILATION
INITIAL	NUMBER	DATI	E	COUNTRY	CLA	ss s		FIS TO
							F	
	COPY OF PA	1870						3
	ORIGINALLY		ER DOCUM	ENTS			<b>3</b>	
EXAMINER INITIAL		ALI	THOD TITLE					
	S. Laman			E, DATE, PERTINEN				<del></del>
Mey	Photophy	sky, et al., "Highly P	n, and Use	in Organic Light	Emitting	g Diodes'	Complexes: Syr. ", Journal of th	ithesis, ie
	American	Chemical Society, V	Volume 123	, No. 18, pps. 43	04-4312	2, 2001.	(published	on Web
		<del></del>					04/13	3/2001)
						<del></del>		
<del></del>			<u>-</u> -		<del></del> .			
EXAMINER <	1/ 1		<del></del>		<del></del>			
	Marie R. G	banistaker			DAT	TE CONS	SIDERED 03/	ININZ
EXAMINER: In	itial if citation consid	lered, whether or not considered. Include	citation is i	n conformance w	ith M.P	.E.P. 609		ough
<u> </u>			-opy or di	S TOTH WITH HEXT	commu	incation t	o applicant.	

# INFORMATION DISCLOSURE SFATEMENT BY APPLICANT PTO-1449

DOCKET NO. 10020/20702	SERIAL NO. 09/978,455
APPLICANT LAMANSKY et al.	
FILING DATE October 16, 2001	GROUP 1774

#### **U. S. PATENT DOCUMENTS**

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS	SUBCLASS	FILING DATE
				_		

#### FOREIGN PATENT DOCUMENTS

						TRANSL	ATION
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
	· · ·				,,,,,,,,,,		

## OTHER DOCUMENTS

EXAMINER INITIAL	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
MRY	M. Maestri, et al., "Photochemistry and Luminescence of Cyclometallated Complexes", Advances in Photochemistry, Volume 17, pp. 1-68, 1992.

EXAMINER Marie	K.	Jamaitzles	DATE CONSIDERED
	7		

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

RECEIVED

SEP 2.6 2002

TC 1700

OPE JC,,				
FEB 1 1 2003 E	DOCKET NO. 10020/20702	SERIAL NO. 09/978,455		
STATEMENT BY APPLICANT PTO-1449	APPLICANT LAMANSKY et al.			
, 110-1447	FILING DATE October 16, 2001	GROUP 1774		

# U. S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS	SUBCLASS	FILING DATE
				RECE	VEN	
				FEB	2000	
				TC 12	2003	

# FOREIGN PATENT DOCUMENTS

						TRANSLATION	
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO

## OTHER DOCUMENTS

I XAMINER INITIAL	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.					
Mey	B.N. Cockburn, et al., "Reactivity of Co-ordinated Ligands. Part XV. Formation of Complexes containing Group V Donor Atoms and Metal-Carbon \(\pi\)-bonds", Journal of the Chemical Society, Dalton Transactions, Vol. 4 (1973), pp. 404-410.					

EXAMINER	Marie	R.	Jamnitules.	DATE CONSIDERED	03/10/03
EXAMINER: Initi	ial if citation co	nsidered, w	ether or not citation is in conformance with M.P.E.P. 609; draw	line through citation if not	in conformance and

not considered. Include copy of this form with next communication to applicant.